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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,269	06/12/2001	Pascal Agin	Q64839	2987
23373	7590	06/07/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			PHUNKULH, BOB A	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/878,269

Applicant(s)

AGIN, PASCAL

Examiner

Bob A. Phunkulh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-44, 49-54 is/are allowed.
- 6) ☒ Claim(s) 45-48, 55 and 56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

This communication is in response to applicant's 03/28/2006 amendment(s)/response(s) in the application of **AGIN** for "**METHOD OF CONTROLLING TRANSMISSION POWER IN A MOBILE RADIO SYSTEM**" filed 06/12/2001. The amendments/response to the claims have been entered. No claims have been canceled. No claims have been added. Claims 26-57 are now pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 45-48, 55-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Baker et al. (US 6,754,505), hereinafter Baker.

Regarding claim 45, Baker discloses a mobile station wherein said transmission power control algorithm simultaneously controls the transmission power of at least two channels, including a data channel and a control channel (see col. 1 line 57 to col. 2 line 2), as a function of transmission quality target value, with the transmission power of said control channel offset relative to the transmission power of said data channel, said mobile station comprising:

means for applying, in the event of target value variation, anticipated variations (see col. 4 lines 53-67, col. 5 lines 1-7) of at least one of the transmission power of the data channel, the transmission power of the control channel and the offset of the transmission power of the control channel relative to the transmission power of the data channel, to obtain an anticipated variation of the data channel transmission power (see col. 1 line 57 to col. 2 line 2 and col. 2 lines 43-51).

Regarding claim 46, Baker discloses the mobile station further comprising means such that in the event of target value variation *the* anticipated variations cause the signal transmitted on the control channel to have the same power before and after *the* target variation and over the same reference period (see col. 3 lines 8-27).

Regarding claim 47, Baker discloses the mobile station further comprising means for applying an anticipated variation of the offset of the transmission power of the control channel relative to the transmission power of the data channel that corresponds to the opposite of *the* approximate value of the target value variation (see col. 1 line 57 to col. 2 line 2 and col. 2 lines 43-51).

Regarding claim 48, Baker discloses a mobile station comprising means for applying an anticipated variation of the transmission power of *the* data channel and the transmission power of *the* control channel that corresponds to *the* approximate value of the target value variation (see col. 5 lines 8-27).

Regarding claim 55, Baker discloses a base station (primary station), comprising:

means for controlling a downlink transmission power as a function of a transmission quality target value,

means for using parameters signaled to *the* base station for the uplink, to determine a target value variation applied in compressed mode, and

means for applying a power offset to *the* downlink transmission power, corresponding to the thus determined target value variation (see col. 1 lines 57 to col. 2 line 2; and col. 2 lines 43-51).

Regarding claim 56, Baker discloses parameters signaled to *the* base station for the uplink include: a parameter for a compressed frame, and a parameter for the second one of two consecutive compressed frames in the case where a transmission gap begins in the first one of *the* two frames and finishes in the second one of *the* two frames, or for a frame following a compressed frame otherwise (see col. 5 lines 8-14).

Response to Arguments

Applicant's arguments filed 3/28/2006 have been fully considered but they are not persuasive.

In page 13, the applicant argue the following:

But there is no suggestion that these adjustments are applied as *anticipatory* changes. Claim 45 clearly describes that an anticipated variation is applied to at least one of three parameters in response to detection of a target variation which will later lead to a corresponding variation. Thus, claim 45 applies the variation to one of these three variables *before* that variable is modified by the control loop in response to target values variations. This is nowhere suggested in Baker et al.

In response to the above argument, the subject matter "anticipatory" is defined as characterized by anticipation¹.

Baker discloses in col. 5 lines 1-7:

As an example, consider an initial sequence of power control step sizes (in dB) of: 3.0, 2.0, 1.5, 1.0, 0.75, 0.75, 0.5, 0.5, 0.25, where 0.25 dB is the minimum step size. Using this sequence with power control signals every 1 ms, an initial error of up to 10 dB could be corrected within half a frame (5 ms), compared with 2.5 frames using the minimum power control step size of 0.25 dB that is normally used. Although as described here the step sizes are symmetric (i.e. the same step sizes are applicable to increases or decreases in power), it is known (for example from U.S. Pat. No. 5,056,109) that this is not always appropriate. In a similar example, which would be simpler to implement, the initial step size (e.g. 2 dB) is used for a predetermined number of power control commands, after which the step size is reduced (e.g. to 1 dB).

The selection of initial step size and the rate of change could be predetermined, or determined dynamically. For example, if the power level adjustment signalled in the acknowledgement 204 is large then the initial step size could be increased. As another example, if the MS 110 is able to determine by other means that it has a moderately high speed relative to the BS 100 a larger step size may be appropriate.

Therefore, Baker discloses the mobile station comprising means for applying anticipated variation of at least one of the transmission power of the data channel to obtain an anticipated variation of the data channel transmission power by applying sequence of power control step in sizes. Applying the variation to one of theses variables *before* that variable is modified by the control loop in response to target values variations is not in the claim.

¹ See Merriam Webster's Collegiate Dictionary Tenth Edition 1997

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In response to the applicant arguments for claim 55 in page 14, Baker discloses in col. 1 lines 58 to col. 2 line 2:

According to a first aspect of the present invention there is provided a radio communication system comprising a primary station and a plurality of secondary stations, the system having a communication channel between the primary station and a secondary station, the channel comprising an uplink and a downlink control channel for transmission of control information, including power control commands, and a data channel for the transmission of data, wherein power control means are provided for adjusting the power of the control and data channels in response to the power control commands and means are provided for setting the initial transmission power after an interruption in transmission to that before the interruption adjusted by an offset.

In col. 2 lines 43-51:

The offset may be predetermined. Alternatively, it may be determined from the difference between the last transmission power and a weighted average of the transmission power over a period (possibly predetermined) before the pause in transmission, or may be determined from a weighted sum of the power control commands applied before the pause in transmission. In such cases, the offset should be quantized to an available power control step size before it is applied.

Therefore, Backer discloses the claimed limitations i.e. determining of transmission quality target value for the downlink power control in accordance with signals sent on the uplink, and the application of the power offset to the downlink.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this action should be mailed to:

The following address mail to be delivered by the United States Postal Service (USPS) only:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

The following address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, Hand Delivery, etc.) as follow:

U.S. Patent and Trademark Office
220 20th Street South
Customer Window, Mail Stop _____
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Wellington Chin**, can be reach on **(571) 272-3134**. The fax phone number for this group is **(571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bob A. Phunkulh
Primary Examiner
TC 2600
Technology Division 2616
June 02, 2006

**BOB PHUNKULH
PRIMARY EXAMINER**